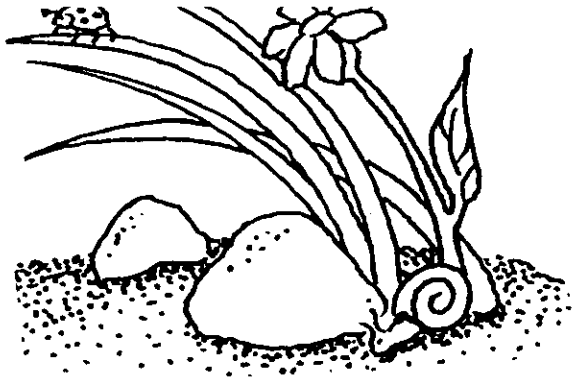


Habitats

Grades K-1

Overview

The students will observe and discuss various habitats. They will also set up a classroom habitat.

Objectives

- To help the students understand what a habitat is.
- To help students understand that all living things need food, water and shelter to live.

Materials

For the presenter:

- a tree by the classroom, a fish bowl, anything that would show a habitat (if you are not able to find anything, a picture will do)
- pictures of wild animals
- pictures of habitats (river, pond, forest, yard, etc.)
- chalkboard
- a glass aquarium tank, clear plastic box or gallon-size glass jar
- fine screening for top
- gravel -- enough for 1 inch cover on the bottom of container
- soil -- enough for 2-3 inches to cover gravel, it should come from the same place that you get your plants
- small plants -- grass, weeds, etc. -- ones that you would find in a meadow, make sure you get a clump of soil when you dig up a plant, they need to have roots for planting
- a spider or insect that you would find in the meadow
- large spoon
- container -- used to put soil into tank or jar
- newspaper to cover the table

Getting Ready

Activity 1

Draw a large picture of a house on the chalkboard. Make a picture of a child beside it. Put the habitat and pictures on a table in front of the class where everyone will be able to see.

Activity 2

Cover another table with newspaper. Put all the things needed to build the habitat on a table. The table should be in an area where all the children can sit in front of it or gather around to see.

Procedures

Background Information

A habitat is a place where plants and animals live. A habitat is like a home, it provides water, food and shelter that living things need to live. All wildlife has specific needs. Examples of habitats are: desert, rainforest, prairies, oceans, rivers, wetlands and forest. A habitat can be a single tree or as large as an ocean. It is important for us to protect the earth's habitats and in turn will protect all living things.

Activity One: Habitats

Start this activity by asking the students where they live. Refer to the house you drew on the chalkboard. Ask: "What things do you have in your home that you need to live?" You will want to guide them so they end up with food, water and shelter. Show the students the habitat that you brought. Ask: "Do you know what animal lives here? What things does it need to live?" Share the pictures of the animals and habitats, discuss what kind of animal it is and where it lives. Point to the word ***Habitat*** on the board and ask: "Does anyone know what the word ***habitat*** means?" ***(The place that provides food, water and shelter for living things)*** Tell the students that habitat is another word for home. Ask: "What is your habitat?"

Refer back to the habitat that you brought. Ask: "What would happen if you took away this animal's habitat?" ***(They would not be able to live.)*** Share with the students that is why it is important for all of us to do things that help take care of places where animals live, like the forest, river, wetlands, etc.

Background Information

Setting up a Meadow Community for the classroom will give the students first hand experience observing an insect's habitat. Other types of communities that you could set up are Rotting Log, Desert, Forest Floor, or Pond. The Meadow Community is used for this activity because collecting insects and finding the materials for setting it up, should not be too difficult. When choosing plants and insects, keep in mind that each living thing must have certain conditions in order to live. Some questions to ask yourself before setting up a habitat: "What is the temperature where the insects and plants live? How moist is the habitat?"

Activity Two: Setting up a Classroom Habitat

Explain to the students that together they will set up a classroom habitat. Ask: "Where do bugs and insects live? What kind of things do they need to live? Where do they find shelter? Where do they find water and food?" Tell the students that they are going to make a home for an insect. Have the students gather around an area where everyone is able to see. Ask the students to volunteer to help with each of the steps. As you put the habitat together with the students, ask questions about why you are putting in the things you brought. How does the insect use the things in his habitat, etc.?"

1. Put about 1 inch of gravel in the bottom of the tank or jar. This is necessary so water can drain through the soil.
2. Next, put 2-3 inches of soil on top of the gravel. Make sure you have it deep enough to put in your plants. Be sure your soil came from the same place you got your plants.
3. Do not leave it level. Make a hill in the corner, or have the soil slope from back to front.
4. Put the plants in the soil.
5. Add a small amount of water if the soil is dry.
6. Put the insect or insects into his or their habitat.
7. Cover the top with screen or glass top.

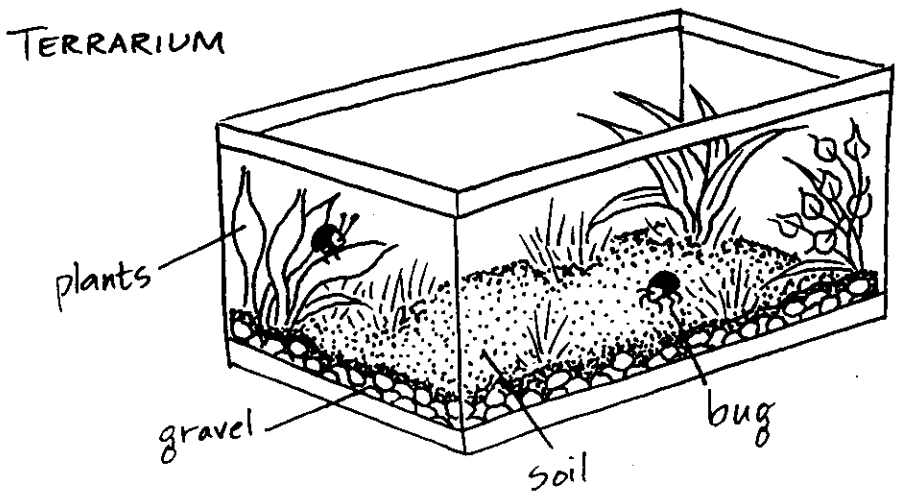
Decide where you are going to keep the habitat. Put it in a place that does not receive too much heat. The fun part for the students will be observing the insects each day. Talk about the times that they will be able to do this. If they have science journals, they could record each day what they observed the insect doing or any changes they notice in the habitat. If your habitat contains ants, provide a few crumbs and some sugar water on a piece of sponge for them. To keep ants from crawling out of the terrarium, spread a layer of Vaseline along the top edge of the tank or jar.

Closure

Ask the students to return to their desks. Tell them to whisper to their neighbor what a habitat is. Ask for one volunteer to share with the class.

Clean up

Roll up newspaper and clean off table. Leave the classroom clean.



You Can Help!

Grade K-1

Overview

The students will learn a song to help them understand the meaning of the word habitat. Students will discuss: the importance of protecting habitats and the plants and animals that live in them; and ways that they can help protect habitats. Each student will make a simple bird feeder to hang in a tree on the playground.

Objectives

- To help students understand the importance of wildlife habitats.
- To help students understand that they can do things to help wildlife.
- To help students understand that it is important that people help to protect wildlife habitats.

Materials:

For the presenter:

- copy of ***Where's the Habitat*** (see page 2)
- chart paper
- colored marking pens
- pictures of a rabbit, a monkey, a lizard, and an alligator

For each group of 4 students:

- 4 large pine cones
- 4 popscicle sticks or table knives
- 1 container of peanut butter - about 1 1/2 cups
- 1 bowl with a bird seed & sunflower seed mixture
- 4 pieces of string - 12 inches long
- newspaper to cover tables
- 1 plastic tub for holding all of the above items

Getting Ready

Activity 1

Write the words to ***Where's the Habitat?*** on chart paper with a colored marker. Hang it up in front of the class where all the children will be able to see it. Hang the pictures of the animals by the chart, next to the part of the song that is about each animal.

Activity 2

Get enough newspaper to cover the students' desks or tables. Put the items for each group in a plastic tub. This is an easy way to pass out materials and collect them when you are finished.

Procedures

Activity One: - Sing A Habitat Song

1. Start by using the questions below to spark students' interest and start them thinking about habitats. "What is a habitat? Who lives in habitats? Why do wild animals need habitats? Think about our playground for a minute. Are there any places where wild animals or insects live on the playground? How about your backyard?" You will want the students to understand that a habitat is the place where an animal gets the food, water and shelter it needs to live.

2. Tell the students that today they are going to learn a song about habitats. It will help us remember how important habitats are to our environment. Show the students pictures of the monkey, alligator, lizard and rabbit. Ask: "Do you know where these animals live? What is their habitat?"

3. Tell them that they are going to learn a song about these animals. Go over the verses to the song. Hold up the pictures of each animal when you sing its verse. Afterwards teach the song to the students.

Background Information

WHERE'S THE HABITAT?
(Sing to the tune of Fre're Jacques)

LEADER:	Where's the rabbit?
	Where's the rabbit?
ALL:	Here I am. Here I am.
LEADER:	Meadow grass is soft and deep.
ALL:	That's where rabbits hop and leap. Hop away, leap away.
LEADER:	Where's the monkey?
	Where's the monkey?
ALL:	Here I am. Here I am.
LEADER:	Jungle trees are towering.
ALL:	That's where monkeys climb and swing. Climb away, swing away.
LEADER:	Where's the lizard?
	Where's the lizard?
ALL:	Here I am. Here I am.
LEADER:	Desert sands get lots of sun.
ALL:	That's where lizards crawl and run. Crawl away, run away.
LEADER:	Where's the 'gaitor. Where's the 'gaitor?
ALL:	Here I am? Here I am?
LEADER:	Swampy water's dark and dim.
ALL:	That's where 'gaitors creep and swim. Creep away, swim away.

WHERE'S THE HABITAT - Earth Day Every Day, National Wildlife Federation, 1990

Additional Music and Songs:

HABITAT - song by William M. Oliver, available on cassette tape (All Aboard) recorded by the T & O Railroad along with other children's songs. Contact Tom Kubisiak, 503-289-8909, 3333 N. Arlington Place, Portland OR 97217

Activity Two: - Making Bird Feeders

Ask the students if they can think of any animals that live in our playground. You should get birds as one of their responses if your playground has trees. If not, possibly you could make this same project and they could put the feeders in a near by park or in trees at home.

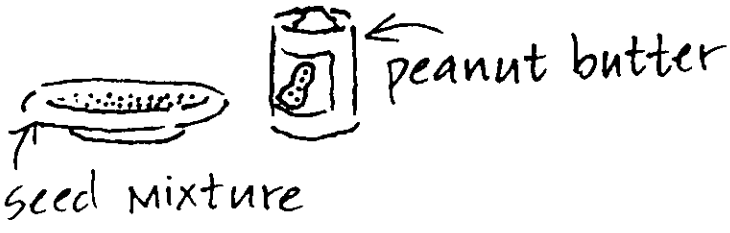
Explain to the students that today they are going to make bird feeders that will help the birds, that live in our playground's habitat, find food to eat.

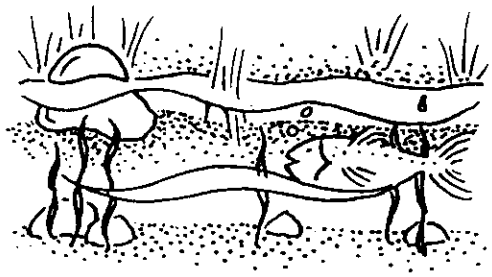
Before handing out any materials to the students, show them what they will be making and how to do it.

1. Each student takes a newspaper and covers their desk.
2. Have one member of each group place the peanut butter, strings, and seed mixture in center of the work area.
3. Each student needs a pine cone and a knife.
4. Tie the string on the top of the pine cone. Leave a loop at the top so you will be able to hang it from a tree.
5. With the knife, spread the peanut butter all over the pine cone.
6. Roll the pine cone in the seed mixture.
7. When you are finished, roll up your newspaper and put it in the garbage.
8. When everyone is finished, take the students outside and hang the cones from the trees.

Closure

While you are outside have all the students point to a habitat. Tell them to whisper to their neighbor what lives there.





Clean Water

Grades K-1

Overview

The students will observe a fish and discuss its habitat and what it needs to survive. They will do an experiment to see if it is possible to clean dirty water. The students will also make a two-sided puzzle to review the fish's habitat.

Objectives

- To help the students understand that dirty water can be cleaned.
- To help students understand that rivers, ponds, lakes and oceans are habitats for fish.
- To help students understand that by keeping the water clean we can help to protect the habitat of fish.

Materials

For the presenter:

- a fish in a bowl or aquarium
- pictures of fish in rivers, lakes, and the ocean
- a sample of the filter the students will make

For each group of 4 students:

- a clear plastic 2 liter bottle with the bottom cut off (see page 2)
- a jar that the 2 liter bottle will sit in, it will be used to catch the water poured through the filter(see page 2)
- 2 balls of cotton
- pebbles - enough to make a 2" layer when placed in the 2 liter bottle
- gravel - enough to make a 2" layer when placed in the 2 liter bottle
- sand - enough to make a 2" layer when placed in the 2 liter bottle1 pint jar with a lid - 3/4 full of clean water
- 1 tbs. of pencil shavings
- 2 tbs. of dirt
- spoon for mixing
- plastic tub for holding each group's materials

For each student:

- 1 copy of the fish puzzle
- scissors and crayons
- 1 sandwich bag

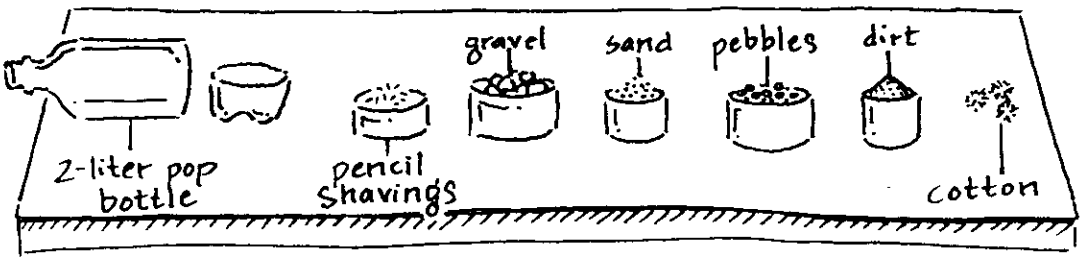
Getting Ready

Activity 1

Put the fish bowl and pictures on a table in front of the class. Write the word ***habitat*** on the chalkboard.

Activity 2

Make a sample filter to use for demonstration. Cut the bottoms off of the 2 liter bottles. Each group should have a tub with the following items in it: a 2 liter bottle, a jar to hold the filter, cotton, container of pebbles, container of gravel, container of sand, 1 pint jar filled 3/4 full of clean water with the lid on, 1 tbs. of pencil shavings, 2 tbs. of dirt, and a spoon. Place tubs on a table that can be accessed easily by the students.



Procedures

Activity 1: Habitats

Start this activity by showing the students the habitat ***(gold fish bowl)*** that you brought. Ask: "Do you know what animal lives here? What things do the fish need to live ***(food, water and shelter)***? Where do these fish get their food? What would happen to the fish if I didn't feed them? What would happen to the fish if I didn't have clean water for them?" Share the fish pictures that you brought. Ask the students if they know the names of the fish and where they live. Point to the word ***habitat*** on the board and ask: "Does anyone know what the word ***habitat*** means? What is the goldfish's habitat?" Hold up the fish pictures again and discuss with the students the different habitats that fish live in. Write the words ***pond, lake, river*** and ***ocean*** on the board by habitat. Emphasize with the students that all the habitats must have water, food and shelter. Ask: "What would happen to the fish if the water was not clean? Do you know how the rivers and lakes get dirty?"

Activity 2: Clean It Up

Tell the students that they are going to do an experiment to see if we can clean polluted water. Ask: "What is water pollution? How does water get polluted? How do we pollute water at school and at home? When you and your family have gone picnicking by a river or stream, what kind of water pollution did you see ***(empty can, trash, picnic wastes, leftover food, etc.)***? Is all water polluted? Can we do anything to make water that has been polluted clean?"

Before handing out any materials, show the students the tub of materials and the filter they will be making. Explain that each group will make a filter together. Remind the groups that they need to take turns. It might be helpful to number the members of the group, so they know whose turn it is to be first etc.

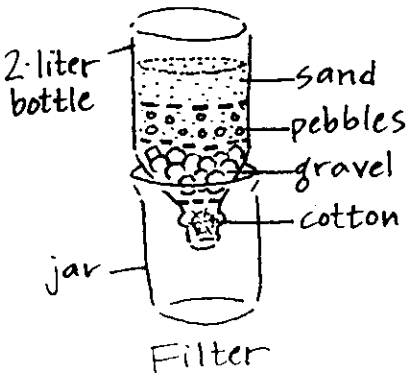
Steps for making the filter:

1. Place the 2 liter bottle upside down in the jar with the neck facing down.
2. Push the cotton down into the neck of the bottle.
3. Put the gravel on the bottom of the bottle on top of the cotton.
4. Put the pebbles on top of the gravel.
5. Put the sand on top of the pebbles.

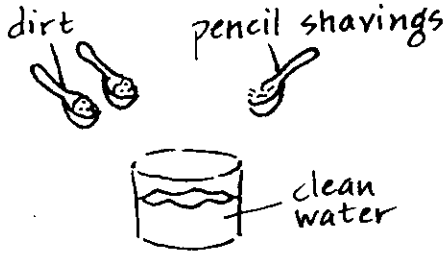
Steps for polluting the clean water:

1. Add the dirt to the jar of clean water.
2. Add the pencil shaving to the water.
3. Mix with the spoon.

Have one member of each group pour the polluted water into the filter. Tell the students to observe what happens. Discuss with the students what they discovered. Ask: "What happened to the dirty water? Where is the dirt and pencil shavings? How is the water in the jar different now? Should dirty water be filtered before it is dumped into our lakes and rivers? Will this help to protect the habitats of fish?"



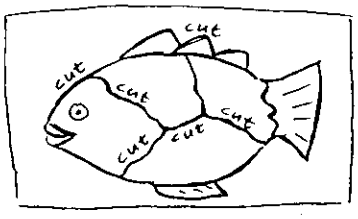
Filter



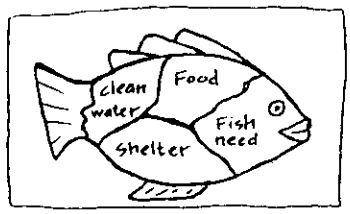
Polluting Water

Activity 3

Show the students how to make the two-sided puzzle. Have them color the blank side. Cut out the fish shape and on the puzzle lines as indicated. See sample below. Tell the students to see if they can put the puzzle together the two different ways. They may keep their puzzle pieces in the plastic bag.



Front
(color)



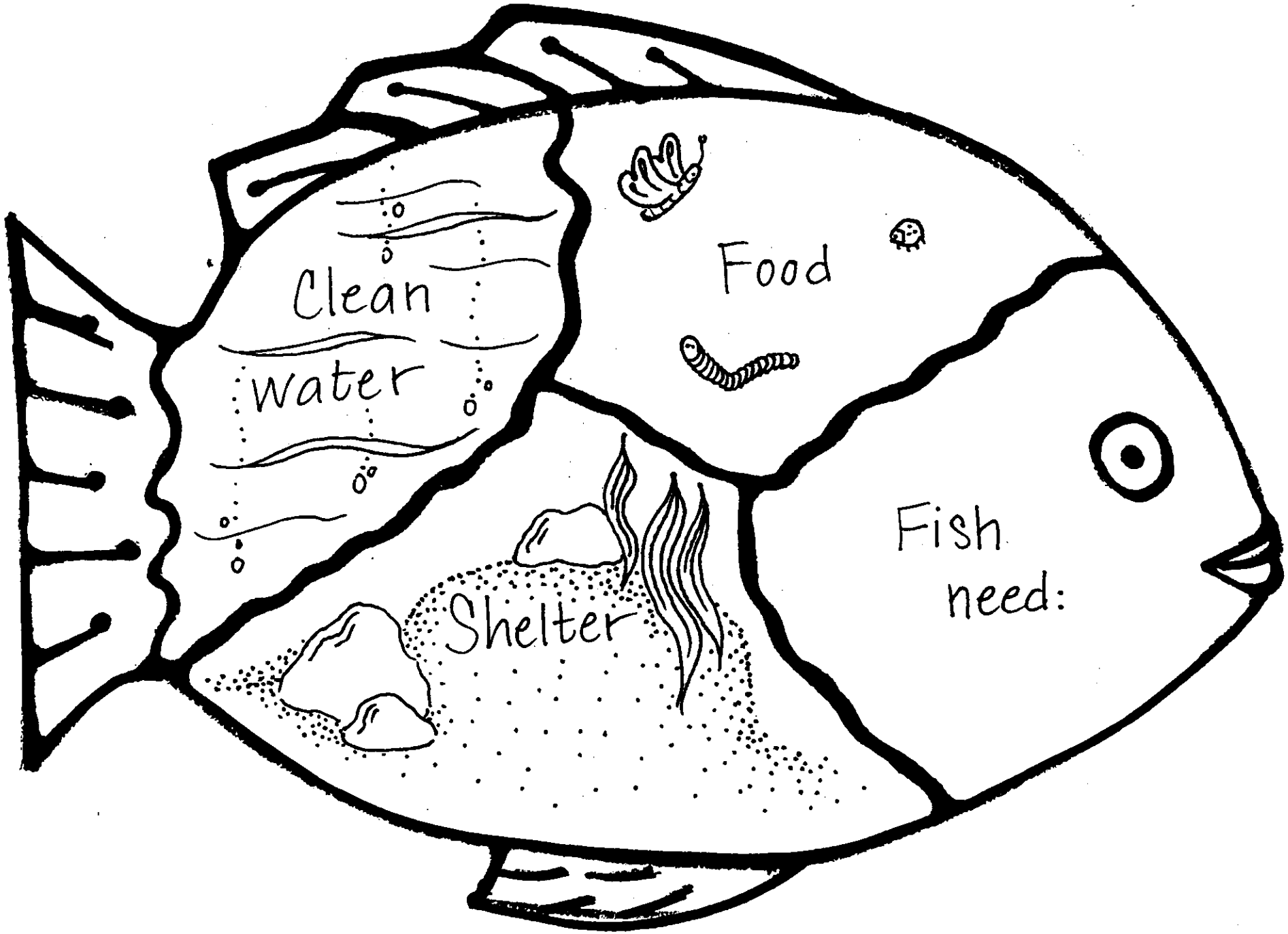
Back

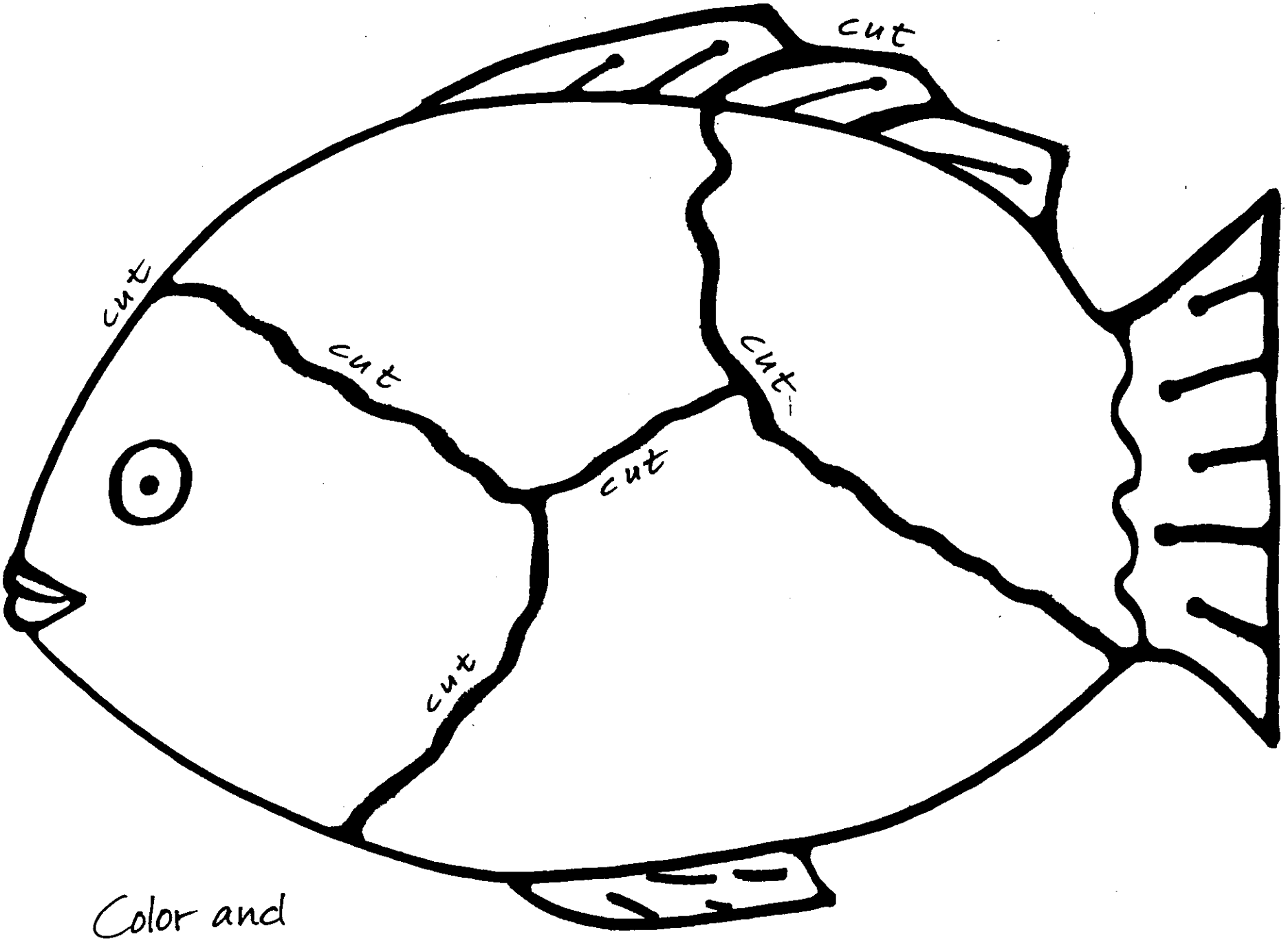
Closure

Tell the students to whisper to their neighbor what they can do to help protect the habitats of fish. Ask a couple of students to share with the class their ideas.

Clean Up

Each group should put all their materials in the tubs and one member can put the tub on the table where you had them.


Clean
water
Food
Shelter
Fish
need:



Color and
cut out